

***NATIONAL WEATHER SERVICE
PRODUCT/SERVICE DESCRIPTION DOCUMENT (PDD)
TYPE: Official Product
DATE: April 17, 2003***

CONVECTIVE SIGMET

Part 1 - Mission Connection

1. Product/Service Description:

Convective Significant Meteorological Advisories (WST) is a text product describing the occurrence or expected occurrence of thunderstorms and related phenomena over the conterminous United States and adjacent coastal waters within 2 hours of issuance time. Each bulletin also contains an outlook period valid from 2 to 6 hours after issuance time.

2. Purpose/Intended Use:

WSTs are intended for dissemination to all pilots in flight to enhance safety, and are particular concern to operators and pilots of aircraft sensitive to thunderstorms and related phenomena. This product is issued in support of the Federal Aviation Administration (FAA) air traffic controllers and flight briefers, and the National Airspace System (NAS).

3. Audience:

The target audience for WSTs includes general and commercial aviation, military and government agencies.

4. Presentation Format:

The National Weather Service (NWS) disseminates the WST in text, bulletin format using approved International Civil Aviation Organization (ICAO) and FAA contractions. Text and graphical WSTs are also available from the Aviation Weather Centers (AWC) website: <http://aviationweather.gov>.

5. Feedback Method:

The National Weather Service is constantly seeking to improve its products based on user feedback. Customers can provide continuous feedback through the National Centers for Environmental Predictions AWC via the AWCs webmaster at <http://aviationweather.gov> and via e-mail to the Aviation Weather Services Branch, National Weather Service Headquarters (NWSHQ). The AWC and NWSHQ also obtains feedback through meetings and service agreements with the national and international aviation community.

Technical and policy questions, and comments regarding WSTs may be addressed to:

National Weather Service
Attn: Richard Stone W/OS23
Aviation Weather Services Program Manager
1325 East-West Highway
Silver Spring, Maryland 20910
e-mail: Richard.Stone@noaa.gov

Part 2 - Technical

1. Format and Science Basis:

WSTs are issued when, during the valid period of the WST, any of the following criteria occur or are forecast to occur:

- a. A line of thunderstorms
- b. An area of active thunderstorms affecting at least 3,000 square miles
- c. Severe thunderstorms and embedded thunderstorms occurring for more than 30 minutes of the valid period regardless of the size of the area

A special WST is issued when either of the following criteria are met and/or forecast to be met for more than 30 minutes of the scheduled WST valid period:

- a. Tornado, hail greater than or equal to $\frac{3}{4}$ inch diameter, or wind gusts of 50 knots or more is reported or indicated when the previous WST did not mention severe thunderstorms.
- b. Indications of rapidly changing conditions, if in the forecasters judgement, they are not sufficiently described in existing SIGMETs.

Three (3) WST bulletins, describing conditions in the eastern, central and western United States, are issued each hour. Each WST bulletin is made up of one or more individually numbered WSTs for conditions within the region. Numbering is sequential and begins with one (1) for the first WST issued each day. A day is defined in terms of Universal Coordinated Time (UTC).

Examples of WST format may be found on the Aviation Weather Center website at:

<http://aviationweather.gov/awc/awc-wsts.html>.

2. Availability:

WSTs are issued hourly at 55 minutes past the hour. Unscheduled specials are issued as needed. Customers can receive the product via the Internet, NOAAPORT, and the WAFS and SADIS Satellite Distribution Networks. Additional information on NWS aviation product dissemination is available at:

<http://weather.gov/om/disemsys.shtml>.

3. Additional Information:

A description of WST policy, area of responsibility, abbreviations and definitions, standards and guidelines, and methods of product dissemination are located in NWS Instruction 10-810 and 10-811 which are available via the Internet at:

http://www.nws.noaa.gov/directives/010/operation_services.htm.